

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 9970.03/PC/PC	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/IB2004/002213	International filing date (day/month/year) 02.07.2004	Priority date (day/month/year) 07.07.2003	
International Patent Classification (IPC) or national classification and IPC C04B18/24, C04B28/02			
Applicant TOSCANO, Gianfranco			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input checked="" type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 07.02.2005		Date of completion of this report 10.08.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Gattinger, I Telephone No. +49 89 2399-	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IB2004/002213

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-18 as originally filed

Claims, Numbers

1-30 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:

* *If item 4 applies, some or all of these sheets may be marked "superseded."*

**INTERNATIONAL PRELIMINARY REPORT
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Box No. II Priority

1. ☐ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☐ copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
 - ☐ translation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2. ☒ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
- ☐ the entire international application,
 - ☒ claims Nos. 28
- because:
- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
 - ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
 - ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
 - ☒ no international search report has been established for the said claims Nos. 28
 - ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
 - ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
 - ☐ See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-27,29,30
Inventive step (IS)	Yes: Claims	
	No: Claims	1-27,29,30
Industrial applicability (IA)	Yes: Claims	1-27,29,30
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/IB2004/002213

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Present claim 28 relates to a product defined (inter alia) by reference to the following parameter:

"reduced expansion resulting from a soundproofing and heat insulating property"

The use of this parameter in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. The example contains no reference regarding an expansion behaviour of the product to explain in what way soundproofing and heat insulating properties are linked to an expansion behaviour. It is impossible to compare the parameters the applicant has chosen to employ with what is set out in the prior art.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

- D1: DATABASE EPODOC, EUROPEAN PATENT OFFICE, THE HAGUE, NL; KR 9612720, 24 September 1996, CHO YONG KIL: "Composition of lightweight concrete", XP002293795
- D2: DATABASE WPI Section Ch, Week 199946 Derwent Publications Ltd., London, GB; Class L02, AN 1999-544906, XP002293796 & JP 11 236280 A (TANIGUCHI Y) 31 August 1999
- D3: US-B-6 475 275 (NEBESNAK EDWARD ET AL) 5 November 2002
- D4: "CHEMICAL ABSTRACTS + INDEXES, AMERICAN CHEMICAL SOCIETY. COLUMBUS, US", 11 June 1988, ISSN: 0009-2258, XP000158199,
- D5: US-A-5 482 550 (STRAIT MARK C) 9 January 1996
- D6: DE 42 33 208 A (HIENDL HERIBERT) 7 April 1994
- D7: FR-A-2 727 675 (CARLUCCI PIERRE ANTOINE) 7 June 1996
- D8: EP-A-0 103 195 (ARHELDER KARL HEINZ) 21 March 1984
- D9: US-A-2 153 837 (VICTOR HYBINETTE NOAK) 11 April 1939

2. The present application does not meet the criteria of Article 33(1) PCT, because

the subject-matter of claims 1 to 27 as well as 29 and 30 is not novel in the sense of Article 33(2) PCT.

- 2.1. The document **D1** discloses (cf. the search report; the references in parentheses applying to this document):

A lightweight concrete with soundproofing properties derived from a mixture comprising cement and cellulose fibres and a suitable amount of water (abstract). The amount of cellulose fibres present in the mixture falls into the scope of independent claims 1 and 21, which are therefore not novel in view of D1.

D1 also discloses the introduction of a foam, by means of a foaming agent, as well as a foamed polymer powder, which falls into the definition of a lightweight inert. Due to the nature of the components (foam and lightweight inert) of the composition the densities defined in dependent claims 2 and 29 are implicitly covered as well. Thus, neither dependent claims 2, 3, 11, 12, 15, 18 nor claims 22 to 24, 27 and 29 can be considered to be novel in light of D1.

- 2.2. Document **D2** discloses a cementitious composition comprising cellulose fibres and foam, whereby the amount of cellulose fibres present in the mixture falls into the scope of independent claims 1 and 21, which are therefore also not novel in view of D2.

According to **D2** the cellulose fibres are derived from used waste paper. Also claims 5 and 6 are therefore not novel.

- 2.3. Documents **D3** to **D9** all disclose compositions comprising a hydraulic binder and cellulose fibres, whereby the amount of cellulose fibres present in the mixture falls into the scope of independent claims 1 and 21, which are therefore also not novel in view of D3 to D9.

D3 discloses the use of colouring pigments (D3: column 3; line 55) as well lightweight inerts of densities between 8 and 320 kg/m³ (D3: column 4; lines 1-2), which falls into the scope of claims 15, 17, 27 and 29, which are also not novel. As foamed, shredded polystyrene is explicitly mentioned as said lightweight inert, neither claims 13, 14 nor claims 25 and 26 can be considered to be novel over D3.

D4 discloses cellulose fibres of 0.4 to 4.5 mm length (D4: abstract), which falls into the scope of dependent claim 4, which is therefore also not novel.

D5 discloses a cellulose fibre containing cementitious composition, whereby the binder is mixed with water prior to the addition of the fibres, which is considered to be novelty-destroying for dependent claim 8.

D6 discloses the use of lime as an alternative to a Portland cement binder to be combined with shredded waste paper, which falls into the definition of dependent claim 19, which is therefore also not novel.

D7 discloses a gypsum binder comprising besides a ground cardboard material also expanded polystyrene and ground cork (D7: page 3; lines 3 to 18), which is novelty destroying for the subject-matter of claims 7, 9, 10 and 20.

D8 and **D9** both disclose the use of sand as an inert aggregate, which falls into the definition of dependent claim 16, which is therefore not novel. The dense composition of D8 furthermore falls into the scope of claim 30, which can therefore also not be considered to be novel.